MUSIC | AUDIO POST | VIDEO | FILM

Euphonix
artist

MC Control

professional control surface

USER GUIDE

Document Revision: B

In the interest of continued product development, Euphonix reserves the right to make improvements to this manual and the product it describes at any time, without notice or obligation.

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Communications and Safety Regulation Information

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or locate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications made to the product, unless expressly approved by Euphonix, Inc., could void the user's authority to operate the equipment.

Always use a shielded Ethernet cable to connect to your MC Control, such as the one supplied in with the unit.

DECLARATION OF CONFORMITY

We Euphonix, Inc.,
220 Portage Ave
Palo Alto, CA, 94306 USA
(650) 846-1173

declare under our sole responsibility that the product
MC Control

complies(y) with Part 15 of FCC Rules.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Canada

This Class B digital apparatus complies with Canadian ICES-003

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada

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Japan

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取扱説明書に従って正しい取り扱いをして下さい。

IMPORTANT SAFETY INSTRUCTIONS

The lighting flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons.

The exclamation point within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with a dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) This product must be connected to an AC power source that provides a safety earthing connection. This unit is provided with a power supply cord set appropriate for your area. Do not modify or defeat the safety earthing feature of the power cord.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15) **WARNING** – TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

16) Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.

17) To completely disconnect this equipment from the AC Mains, disconnect the power supply cord plug from the AC receptacle.

18) The mains plug of the power supply cord shall remain readily operable.

19) Operator Accessible Fuse (UK only):

Caution: For continued protection against risk of fire, replace only with same type and rating of fuse.

Attention: Pour ne pas compromettre la protection contre les risques d'incendie, remplacer par un fusible de même type et de même caractéristiques nominales.

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Chapter 1: Introduction to the Artist

The MC Control and MC Mix comprise the Artist desktop control surfaces. They use a 100 Mbs Ethernet *EuCon* connection to control audio/video applications running on a workstation computer. EuCon is a high-speed communication protocol and enables control of virtually every application feature.

The MC Mix and MC Control can each run as standalone devices and up to four MC Mixes can be used, with or without an MC Control, to create a larger control surface. The Artist borrows many features from the Euphonix MC Pro and System 5-MC.

Figure 1-1 MC Control and MC Mix

The MC Control supports two types of applications:

- *EuCon-aware* applications (i.e., Cubase, Logic Pro) are written to directly support the EuCon protocol. They provide the highest level of integration, high-resolution controls, and high-speed connectivity.
- *Non-EuCon-aware* applications that support Mackie Control or HUI (i.e., Pro Tools, Final Cut Pro and Digital Performer) can control many functions but are less integrated than EuCon-aware applications.

The MC Control can provide some functionality over non-EuCon-aware applications that do not support HUI or Mackie Control by sending out keystroke commands over EuCon.

EuControl Software

The *EuControl* software application is responsible for finding, linking, and communicating with all MC Controls and MC Mixes on the network. EuControl must be installed on the workstation computer that runs the applications before using the Artist devices.

Conventions Used in this User Guide

The User Guide refers to all functions labeled on the MC Control surface and rear panel with all caps in bold type (i.e., **NUDGE ▶**, **PAN**, **SEL**, **SOLO**).

The Shift key is used in conjunction with other keys to access secondary functions labeled in **blue** above the primary function. Two Shift keys are located at the MC Control's bottom-left and -right. To describe Shift functions simply, "press and hold the Shift key then press the **NUDGE ▶** key" is written as "press the **CLOSE** key."

Track refers to an application's track, while *fader strip* or *strip* refers to the MC Control's hardware fader strip.

How to Use the PDF

The Acrobat PDF version of this manual can be a valuable online help learning tool while using the MC. These are some useful features of the PDF:

- The Bookmarks on the left serve as a continuously visible table of contents. Click on a subject heading to jump to that page. Click a **+** symbol to expand that heading to show subheadings. Click the **-** symbol to collapse a sub-heading.
- The manual's table of contents and list of figures are *active links* to their pages. Select the hand cursor, allow it to hover over the heading until it turns into a finger. Then click to locate to that subject and page.
- All cross references are active links. Allow the hand cursor to hover over the reference until it turns into a finger and click to follow the reference.
- Use the left and right arrow keys on the bottom bar to go back and forth between views. This is a great way to follow a cross reference and return to the page from which you were reading.
- Select the **Find** item from the Edit menu (Ctrl-F) to search for a subject. This can be used as an "index on the fly."
- Use the magnifying glass tool or the zoom edit box on the top bar to zoom in/out. This is helpful when examining a complex graphic or setting the text size for easy reading online.

Acrobat Reader version 6 or later is required to open the PDF. This can be downloaded for free from:
http://www.adobe.com/products/acrobat/readstep2.html

Chapter 2: Setup and Installation

Euphonix is dedicated to making your MC Control experience enjoyable and trouble-free so we will periodically update the following software and documentation:

- **EuControl**: This software runs your MC Control and communicates to your audio/video application. Always download the new version if prompted to do so when you launch EuControl.
- **MC Control User Guide** (PDF): This is the complete user guide for your MC Control and the document you are currently reading.
- **EuCon Application Setup Guide** (PDF): The MC Control supports many applications, each with a slightly different setup procedure. This document includes supplementary instructions for each application.

Before proceeding, download the latest versions from:
www.euphonix.com/artist/support

2.1 Setting Up the MC Control

Unpack your MC Control, power adapter, AC power cord, installation CD, Ethernet crossover cable, and riser brackets from its box.

2.1.1 Elevating the MC Control

The MC Control can be elevated *or* angled using small foldout legs on the bottom of the unit or elevated *and* angled by attaching the larger riser brackets. Since either method requires turning the MC Control over, it is easier to do this before attaching any cables. Turn it over and place it on a soft surface.

Pull out all four of the small foldout legs to moderately elevate the unit; pull out only the back two to angle the unit towards you (Figure 2-1 left).

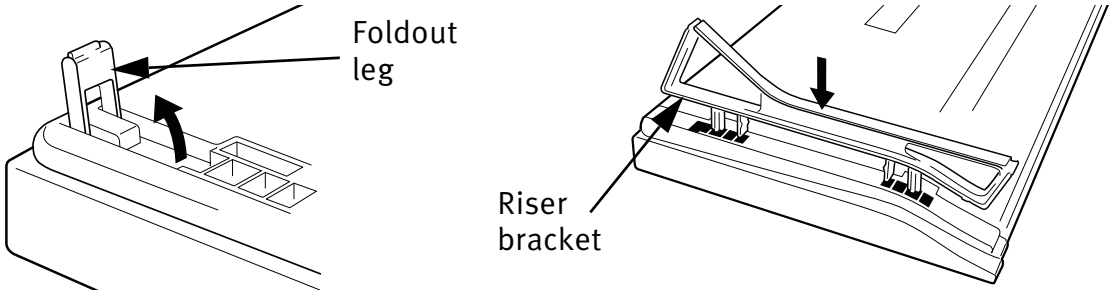

Figure 2-1 Foldout leg (left); riser bracket (right)

Two larger, detached riser brackets elevate and angle the unit more than the foldout legs. Use moderate force to snap them into the bottom panel as shown in Figure 2-1.

To remove the riser brackets:

1. Slide the side panels off (Figure 2-2 left).

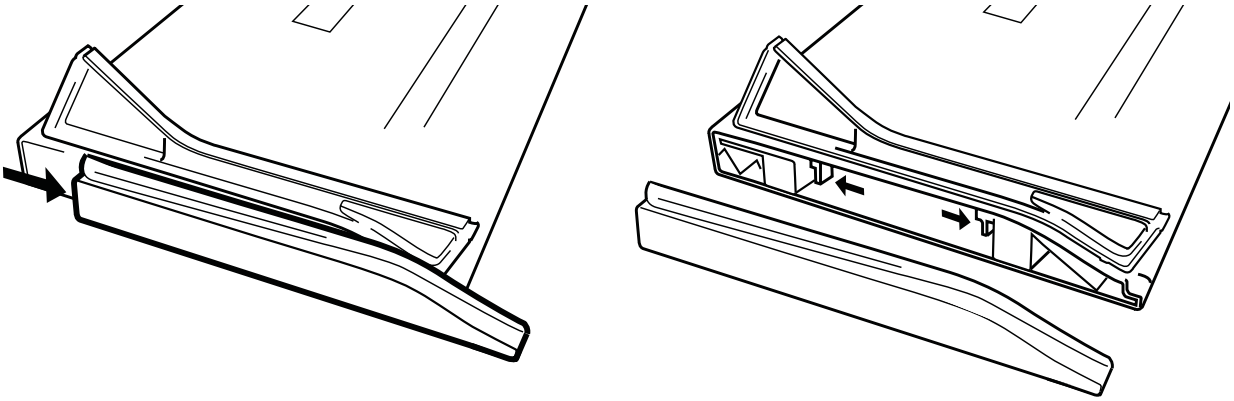

Figure 2-2 Removing side panels (left); removing riser brackets

2. Press the tabs to release the riser brackets (Figure 2-2 right).

3. Lift the riser bracket out of the MC Control to remove

2.1.2 Physically Linking Artist Devices

An MC Control can be physically attached to up to four MC Mixes to form a larger, stable control surface. See *Surfaces on page 40* to use EuControl to link the surfaces in the desired order.

To join an MC Control to an MC Mix:

1. On the MC Mix, use a #2 Phillips screwdriver to remove the two silver screws (Figure 2-3).

The screws may be tight, so you may have to use some force.

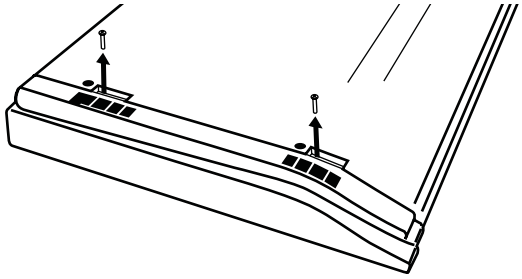

Figure 2-3 Removing screws from the bottom panel

2. Lift the black plastic connecting part and side panel up and out of the MC Mix (Figure 2-4).

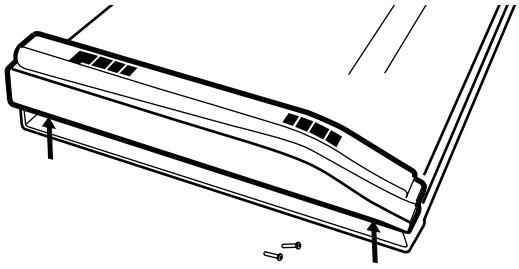

Figure 2-4 Removing connecting part and side panel

3. On the MC Control, remove the side panel (see Figure 2-2 left) on the end where it will attach to the MC mix.

4. Slide the connecting part of the MC Control into MC Mix to attach them together (Figure 2-5).

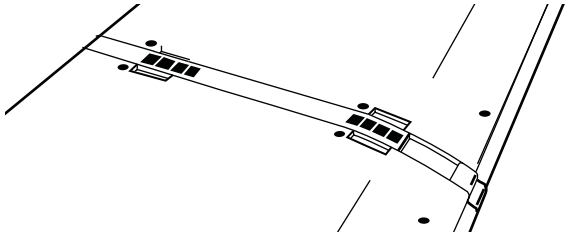

Figure 2-5 MC Mix and MC Control attached by connecting at side panel

2.2 Installation

1. If you downloaded the latest software from the web, double-click the installer. Otherwise, insert the installation CD into your Macintosh.

NOTE: Be sure to eject the installation CD in your Mac if you downloaded the latest software from the web.

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2. Follow the instructions to install the software.

   If prompted to download the most current version of EuControl, follow the onscreen instructions.

   EuControl will launch automatically and is running when this icon appears in your menu bar.

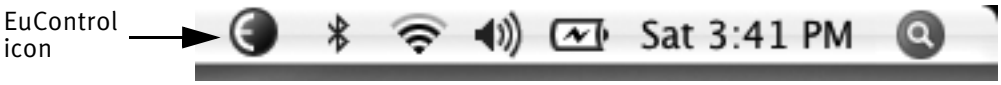

Figure 2-6 Menu bar with EuControl icon

3. Shut down your Macintosh.

4. Plug one end of the AC power cord into the power adapter (Figure 2-7 left) and the other into a power outlet. Make sure the AC power cord is pushed all the way into the adapter.

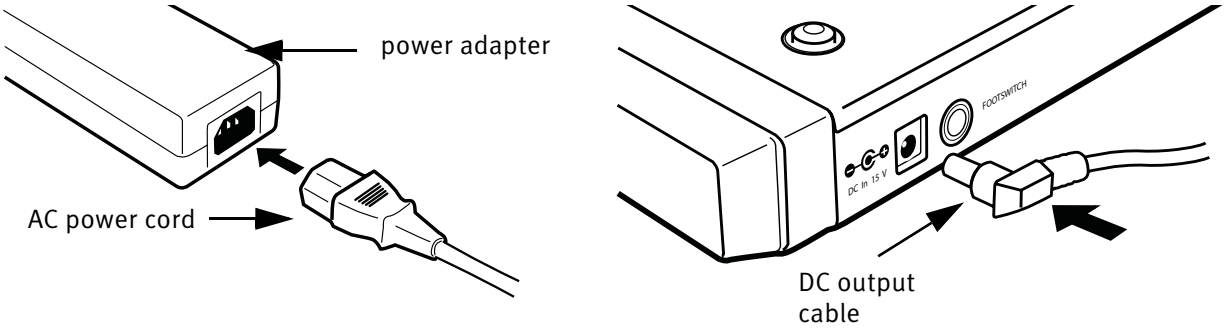

Figure 2-7 Connecting the power adapter

5. Connect the DC output cable from the power adapter to **DC In** on the left side of the rear panel (Figure 2-7 right).

6. Plug one end of the Ethernet crossover cable into the Ethernet jack (labeled with) on the rear panel of the MC Control (Figure 2-8).

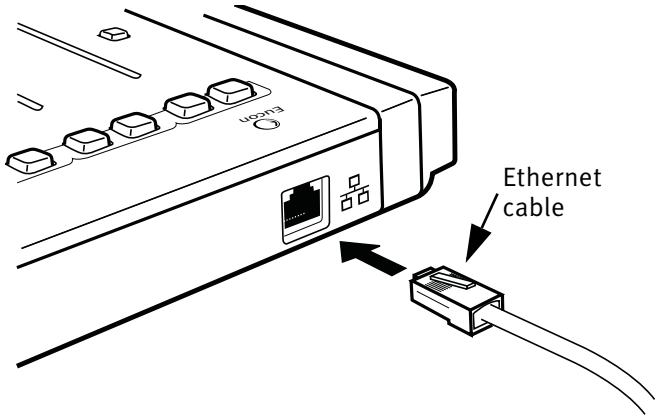

Figure 2-8 Ethernet cable and rear panel jack

7. Plug the other end of the Ethernet crossover cable into an open Ethernet jack on your computer, router, or Ethernet switch (Figure 2-9).

   An Ethernet router or switch is required to connect additional MC Mixes or to a local area network. Note that connecting directly to the computer (Figure 2-9-right) may require removing your Internet cable.

   If you have a Mac with two Ethernet ports, use Ethernet 1, not Ethernet 2.

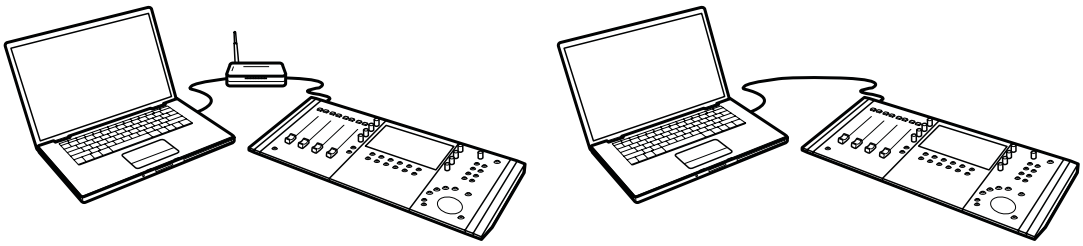

Figure 2-9 MC Control connected to router (left) and directly to computer (right)

8. Turn on your router (if applicable), then turn on your Mac and wait until it finishes starting up.

9. Press and release the **POWER** switch on your MC Control.

   Look at the top-right of your screen and wait up to 60 seconds. A green icon in the menu bar indicates correct installation.

   If you did not see the green icon:

   - See *My Surfaces on page 40* and add the MC Control manually.
   - Shut down the MC Control and the Mac and repeat steps 8 and 9.
   - If your Mac is pre-2002 and you are using an Ethernet router or switch, you need to purchase a normal straight-through Ethernet cable (instead of the crossover Ethernet cable supplied) from a computer store.
   - See www.euphonix.com/artist/support for the most current trouble-shooting information.

10. If you downloaded the latest software from the web, you may need to update the firmware on your Artist devices. See *Update Firmware on page 49* for instructions.

11. Launch your application and open a project (Logic, Cubase, Digital Performer, Pro Tools, etc.).

12. To set up your application to work with the MC Control, refer to the *EuCon Application Setup Guide* that you downloaded at the beginning of this section.

Controlling a Second Workstation

The MC Control can control applications running on a second computer, referred to in this guide as a *workstation*. Most users will not need to do this because EuControl will be running on the same workstation as the their audio/video applications.

Insert the installation CD into your Macintosh or, if you downloaded the latest software from the web, double-click on the installer. Follow the instructions to install the software.

NOTE: Be sure to eject the installation CD in your Mac if you downloaded the latest software from the web.

Copy the latest software that you downloaded at the beginning of this chapter over to the second workstation. Double-click the *Install EuCon Workstation* installer in the *Extras* folder and follow the instructions to install the EuCon software.

Connecting a Footswitch

The MC Control has a ¼-in **FOOTSWITCH** input on the rear panel. The footswitch can be used to punch in and out of recording. Plug the footswitch in before powering on the MC Control. See page 46 for details.

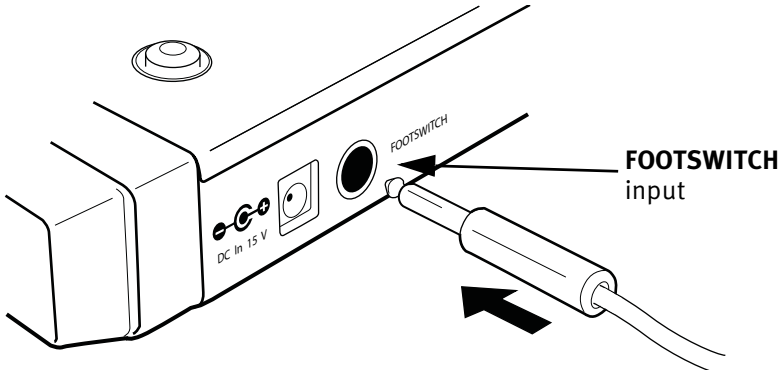

Figure 2-10 FOOTSWITCH input on rear panel

Chapter 3: Common Tasks

If you completed the steps in Chapter 2: *Setup and Installation*, you are ready to start learning about your MC Control. We recommend performing these simple tutorials of common tasks in the order presented. The following important user interface items and terms are used in the tasks:

- The Soft Knobs can be turned like a conventional knob and pressed like a switch to access an additional context-sensitive function (some do not have a second function).
- The Soft Knobs access a hierarchical menu system. The beginning of the menu system, called the *top-level knobset*, allows choosing among eight functions to control with the Soft Knobs.
- The Touchscreen has two rows of six Soft Key labels that correspond to the two rows of physical Soft Keys (Figure 3-1). Press the **SOFT KEYS** ▲ and ▼ page keys to display additional Soft Key labels.
- Press and hold the Shift key, found at the MC Control's bottom-left and -right, to access the functions labeled in blue (Figure 3-3).

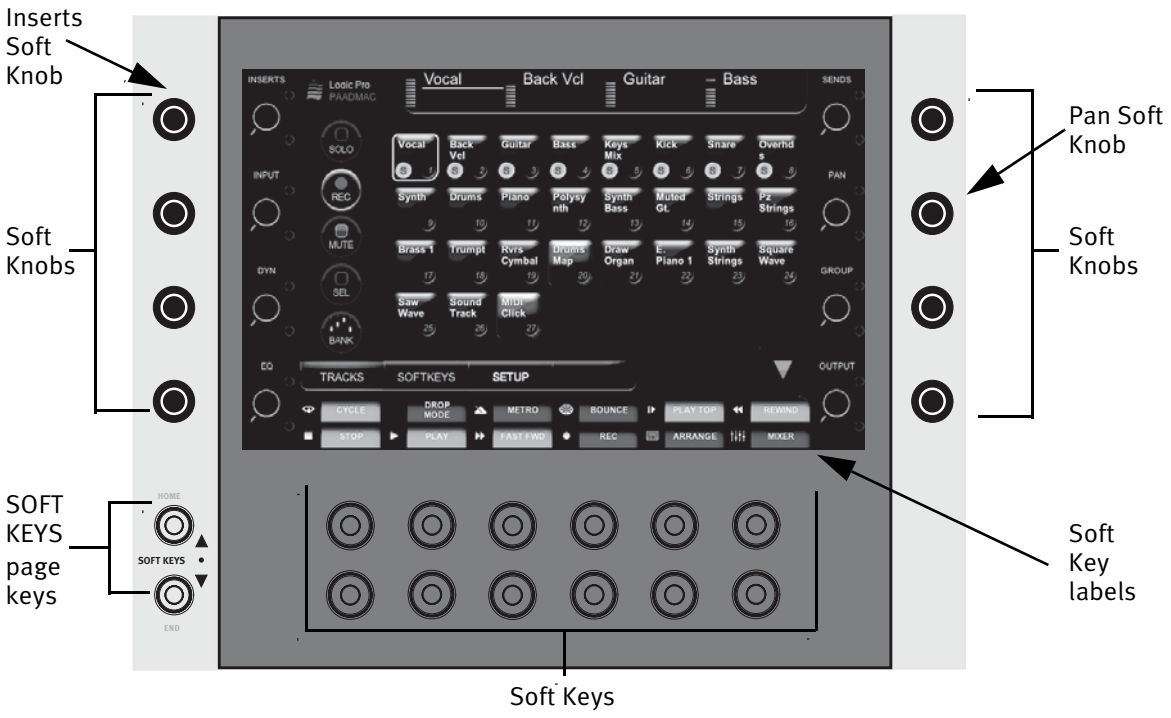

Figure 3-1 Soft Knobs, Soft Keys, and Touchscreen

Fader Strip

1. Press strip 1's fader **SEL** key on your MC Control (Figure 3-2).

   The corresponding track is selected in your application and highlighted on the Touchscreen.

2. Move strip 1's fader up and down.

   You are now controlling the level of your application's first track with your MC Control. The top of the Touchscreen displays a level meter and other track information.

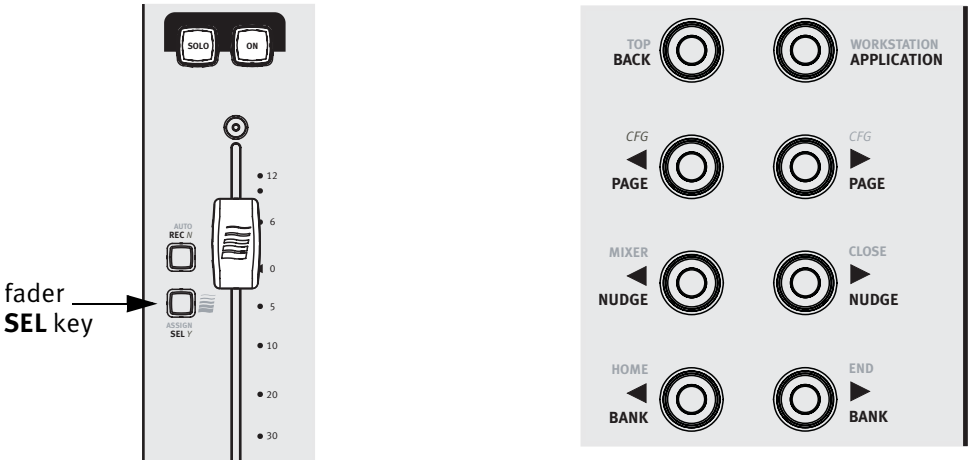

Figure 3-2 Fader strip (left); **PAGE, NUDGE, BANK,** and **BACK** keys (right)

3. Press the **PAN** Soft Knob (Figure 3-1) to access the Pan knobset.

4. Turn the appropriate Soft Knob to adjust the pan of your application's audio track.

   Note that this is *not* the same knob you pressed in step 3.

5. Press the **NUDGE ▶** key (Figure 3-2) to move all four tracks over one strip.

   If tracks 1–4 were assigned to strips 1–4, tracks 2–5 are now assigned to strips 1–4.

6. Press and hold the Shift key (Figure 3-3) and press the **BANK ◀** key (Figure 3-2) to restore tracks 1–4 to strips 1–4.

   The Shift key accesses the functions labeled in blue, in this case the **HOME** function. For convenience, another Shift key is located at the bottom-left of the MC Control.

7. Press the **BANK ▶** key (Figure 3-2) to shift tracks over four at a time.

   If tracks 1–4 were assigned to strips 1–4, tracks 5–8 are now assigned to strips 1–4.

   NUDGE ◀ and **BANK ◀** keys perform similar operations but in the opposite direction.

Inserts

1. Add a plug-in on track 1 of your application.
2. If tracks 1–4 are not assigned to strips 1–4, press and hold the Shift key (Figure 3-3) and press the **BANK ◀** key to restore tracks 1–4 to strips 1–4.
3. Press strip 1's fader **SEL** key.
4. Press the **BACK** key (Figure 3-2) until the top-level knobset is displayed on the Touchscreen.
5. Press the **INSERTS** Soft Knob (Figure 3-1).

   The names of the plug-ins on that track are distributed across the Soft Knobs.
6. Press the Soft Knob beside the desired plug-in's name to select it.

   The plug-in's parameters are distributed across the Soft Knobs.
7. Turn the Soft Knob beside the desired parameter to adjust its value.
8. Press the **PAGE** keys to access more parameters.
9. Press the **BACK** key to exit that plug-in.

Transport Keys and Jog Wheel

1. Use the **PLAY**, **STOP**, **FF**, and **REW** buttons to navigate the timeline of the edit window of your application.
2. Press the **JOG** key.
3. Spin the Jog Wheel clockwise and counterclockwise to move forward and backward, respectively, on the timeline.

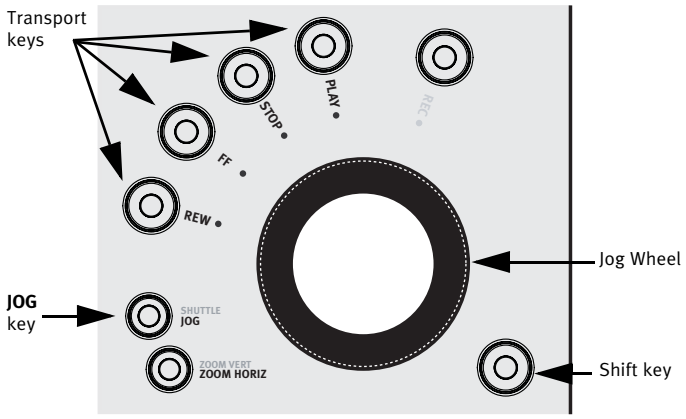

Figure 3-3 Jog Wheel, transport keys, and bottom-right Shift key

Chapter 4: Surface Controls

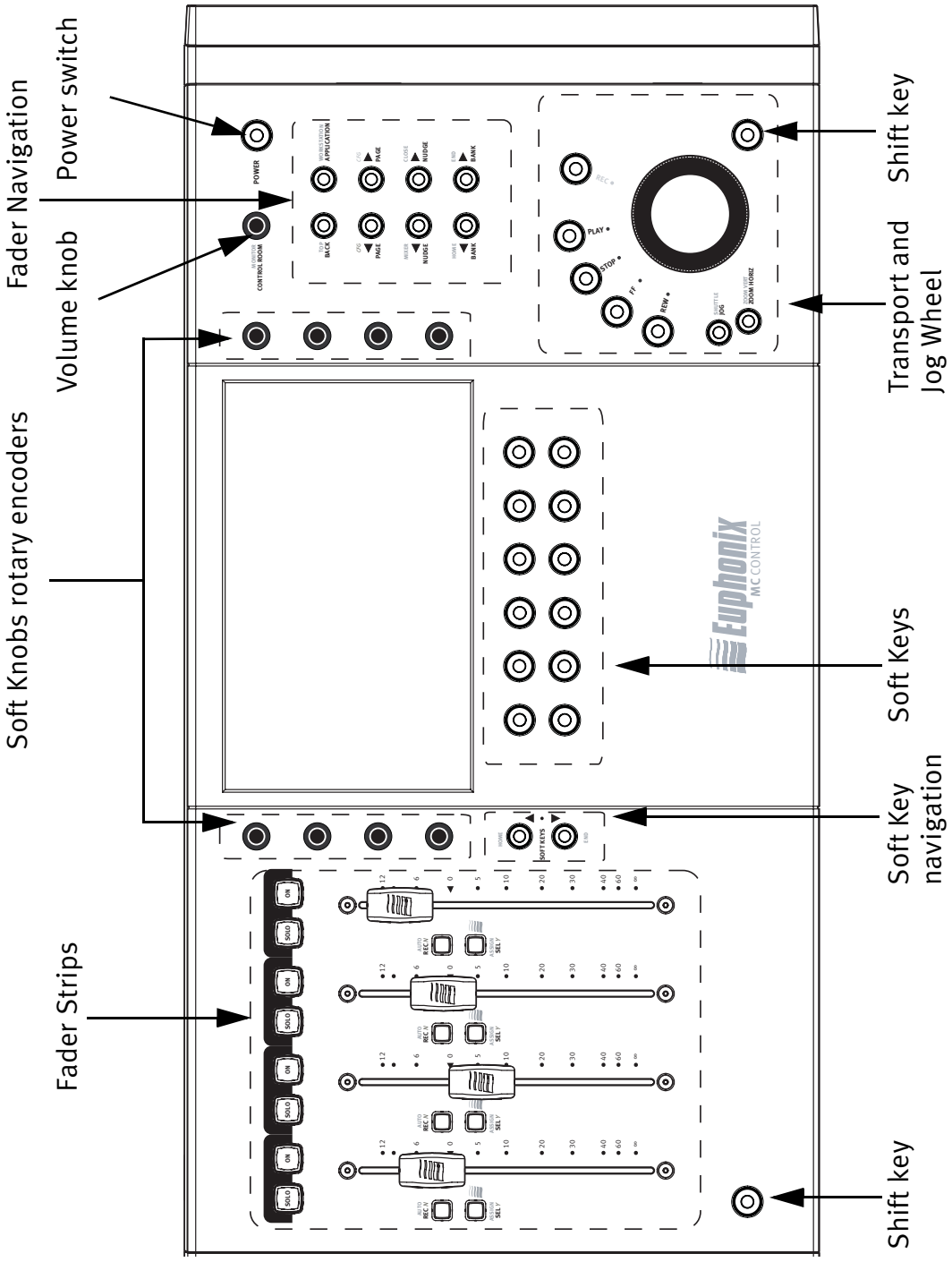

Figure 4-1 MC Control surface

The MC Control has four channel strips each with a touch-sensitive fader, eight touch-sensitive knobs surrounding a 7-in touchscreen, twelve soft keys, transport switches, a Jog wheel, and various navigation buttons.

The MC Control comes with an external DC power supply. Rear panel jacks include: DC power input, RJ-45 Ethernet, and ¼-in footswitch.

4.1 Power Switch

Press and release the **POWER** switch to turn the MC Control on/off.

- The Touchscreen shows a Euphonix logo upon power up.
- All activity on the Touchscreen ceases upon power down.

4.2 Shift Key

The Shift key is used in conjunction with other keys to access the functions labeled in **blue** above the primary function. Press and hold the Shift key, found at the MC Control's bottom-left and -right, then press the other key.

The User Guide uses the following simplified terminology to describe Shift functions: "press the Shift + **APPLICATION** keys" is written as "press the **WORKSTATION** key."

The Shift key can be locked on like **caps lock** on a computer keyboard by pressing both Shift keys simultaneously. This is useful if you plan to access several Shift functions consecutively. Press either Shift key to unlock.

4.3 Fader Strips

The MC Control provides four fader *strips*, each with a touch-sensitive fader, that control *tracks* in an audio or video application.

4.3.1 Fader

The fader controls the track assigned to this strip. It is motorized, so it reflects changes made in the application, such as automation. It is also touch sensitive, which some applications use when automating.

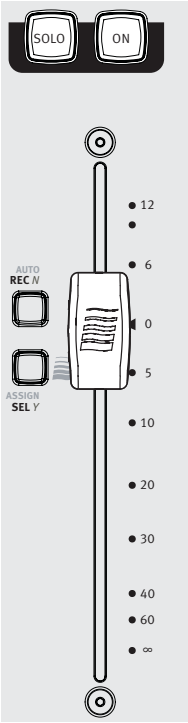

Figure 4-2 Fader strip

When the **Select by Touch** General preference is set (see page 44), touching a fader selects that track in the application and attentions it, just like pressing the **Sel** key.

4.3.2 ON

The track is on (unmuted) when the strip's **On** key is lit and off (muted) when the strip's **On** key is not lit.

4.3.3 SOLO

The **SOLO** key lights red when that strip's track is soloed and is unlit otherwise.

4.3.4 SEL

Pressing a fader's **SEL** key selects that track in the application and *attentions* it on the MC Control. The **SEL** key lights yellow when the track is selected and is unlit otherwise. All knob functions operate on the attentioned track.

NOTE: *Some applications allow selecting multiple tracks if the* **Shift** *key on the workstation is held down while selecting tracks. In this case, the attentioned track is the one whose* **SEL** *key was most recently pressed.*

4.3.5 ASSIGN

Press the **ASSIGN** key to display the Assign tab in the EuControl Settings dialog (see *Assign* on page 56).

4.3.6 REC

Press the **REC** key to enable recording on a track. The REC key lights red to indicate that track is enabled (*armed*) for recording. Press the **REC** key to cancel a track enabled for recording.

NOTE: *Some applications blink the* **REC** *LED when armed but not recording and light solid when recording.*

4.3.7 AUTO

To change the application's automation mode on a track, press the **AUTO** key until the desired automation mode displays on the Touchscreen.

4.4 Navigation Controls

Scroll through the application's *tracks* using the **BANK** and **NUDGE** keys. **HOME** and **END** are shortcuts to the first and last banks, respectively.

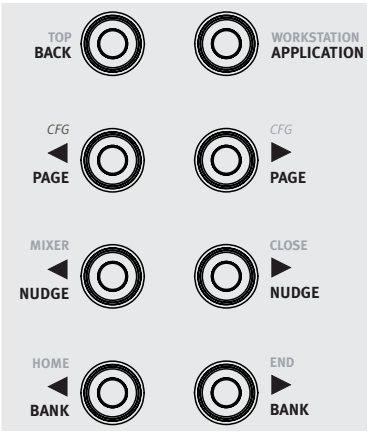

Figure 4-3 Fader navigation controls

4.4.1 BANK and NUDGE

The **BANK** and **NUDGE** keys change which tracks are assigned to the strips. The four strips can be thought of as a window that moves in the direction indicated by the arrow over the application's tracks (Figure 4-4).

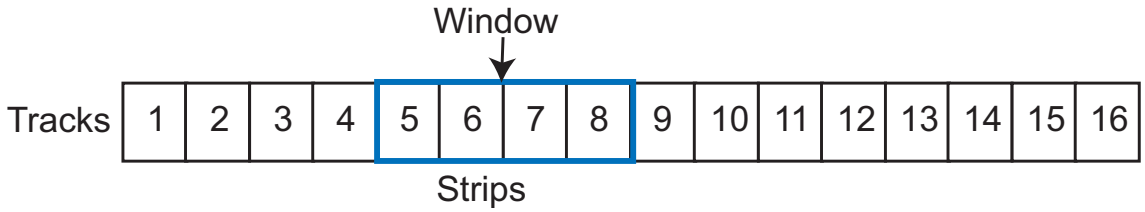

Figure 4-4 Strips window moves over application tracks

NUDGE ◀

Moves the window *one track* to the left. If strips 1–4 had tracks 5–8, they now have tracks 4–7.

NUDGE ▶

Moves the window *one track* to the right. If strips 1–4 had tracks 5–8, they now have tracks 6–9.

BANK ◀

Moves the window *one bank* (four tracks) to the left. If strips 1–4 had the bank starting at track 5, they now have the bank starting with track 1. Pressing **BANK ◀** again does nothing because the first bank is already shown.

BANK ▶

Moves the window *one bank* (four tracks) to the right. If strips 1–4 had the bank starting at track 5, they now have the bank starting with track 9.

4.4.2 MIXER and CLOSE

Not all applications support these keys.

MIXER

Opens and closes the application's mixer window.

CLOSE

Closes any open window or dialog box on the application.

4.4.3 HOME and END

HOME

Moves to the first bank with tracks 1–4 assigned to strips 1–4.

END

Moves to the last bank.

4.4.4 APPLICATION

Press the **APPLICATION** key to toggle between the two most recently used open applications. Hold down the **APPLICATION** key and press **BANK ▶** to toggle between all open applications in a circle. Hold down the **APPLICATION** key and press **BANK ◀** to cycle through applications in the opposite direction.

4.4.5 WORKSTATION

The MC Control can control applications running on a second computer, referred to in this guide as a *workstation*. Press the **WORKSTATION** key to attach the MC Control to another workstation. You must first use EuControl to create a list of workstations that this key switches between (see *Workstations* on page 42).

While attached to a second workstation, your Mac's keyboard and mouse can be configured to control that workstation and not your Mac (see page 51).

4.4.6 Navigating Among Multiple Artist Devices

The **BANK** and **NUDGE** keys perform the identical actions on the combined set of tracks.

4.5 Knobs

Eight touch-sensitive knobs surround the Touchscreen. Each is a continuously rotating knob that adjusts parameters such as pan and aux send levels. The knob has a built-in switch allowing it to be pressed from the top. This is called the Knob Top key and is typically used to access sub-menus but also to turn parameters on/off.

4.5.1 Knob Set Selection

A *knob set* is an array of knobs used by EuCon applications to control plug-ins, EQs, dynamics, aux sends, etc. When the MC Control first starts, the Top Level Knob Set is displayed on the Touchscreen which shows all eight knob sets beside the eight knobs. Press a Knob Top to select that knob set and enter the MC Control menu system.

Some knob sets can display another knob set called a *sub-menu*. For example, the Inserts knob set shows the names of every plug-in inserted on the track, one plug-in name per knob. Pressing a plug-in's Knob Top key displays its parameters on the knobs for editing. This new knob set is a *sub-menu* of the Inserts knob set. Press the **BACK** key to return to the top of the Inserts knob set. Since sub-menus can be more than one level deep, this can be accomplished by pressing the **BACK** key repeatedly.

INSERTS

Pressing the **INSERTS** key displays the inserts knob set for editing plug-ins. The first plug-in is displayed on the knob. Pressing one of these Knob Tops displays the first eight plug-in parameters for editing. Pressing a plug-in's Knob Top displays its parameters for editing.

EQ

Press the **EQ** key to display the EQ knob set to configure equalization controls and filters. This shows four EQ bands on eight knobs.

AUX

Press the **AUX** key to display the Aux knob set to control auxiliary sends. The first aux send is displayed. Up to eight aux sends can be shown at once.

PAN

Press the **PAN** key to display the Pan knob set to configure left/right or surround panning. The left/right pan control is typically displayed. The first page of eight pan knobs is shown.

INPUT

Press the **INPUT** key to display the Input knob set to configure input routing, mic gains, phantom power, and other application-specific parameters.

DYN

Press the **DYN** key to display the Dynamics knob set to configure compressors, limiters, expanders, and gates.

GROUP

Press the **GROUP** key to display the Group knob set to configure group bus routing or control group (VCA) membership.

MIX

Press the **MIX** key to display the Mix knob set to configure output routing.

4.5.2 Knob Functions

Each knob has the following controls:

- Touching the knob's image on the Touchscreen toggles the state of its primary parameter, such as EQ Band 1 on/off. When on, a small green LED lights on the lower left.

- Pressing the Shift key and touching the knob's image on the Touchscreen toggles its secondary parameter (if it exists). This is used to toggle an aux send between pre/post fader.

  This can also change the knob function between two or more parameters, such as EQ Frequency and Q.

  When active, a small yellow LED lights on the upper left.

4.5.3 Knob Set Navigation Keys

Since a knob set may have more parameters than knobs, the **PAGE ◀** and **PAGE ▶** keys scroll among them.

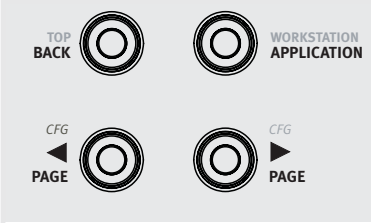

Figure 4-5 Knob Set navigation keys

PAGE ◀

Press the **PAGE ◀** key to scroll to the previous page. When on the first page, pressing **PAGE ◀** key does nothing. The **PAGE ◀** key lights yellow when there is a previous page to go to.

PAGE ▶

Press the **PAGE ▶** key to scroll to the next page. When on the last page, pressing the **PAGE ▶** key does nothing. The **PAGE ▶** key lights yellow when there is a next page to go to.

Configuration Pages (CFG)

Many knob sets have a *configuration page* to set up that knob set. The configuration page for the Inserts knob set, for example, is used to assign plug-ins to a track. The configuration page for the Aux knob set assigns aux sends to a track. Some applications use the configuration page to recall plugins and EQs.

Press the **PAGE ◀ + PAGE ▶** keys simultaneously to display a knob set's configuration page, if it has one. When on the configuration page, both the **PAGE ◀** and **PAGE ▶** keys light.

BACK

Press the **BACK** key once to return to the previous knob set. Press the **BACK** key repeatedly to back out of all sub-menus and display the top level knob set.

TOP

Press the **TOP** key to immediately back out of all sub-menus and display the top level knob set. This is equivalent to pressing the **BACK** key repeatedly.

4.6 Soft Keys

The MC Control supports Surface Soft Keys (discussed in this section) and Touchscreen Soft keys (*Soft Key View* on page 43). Underneath the Touchscreen are 12 soft keys (six per row). The bottom of the Touchscreen contains labels for each soft key.

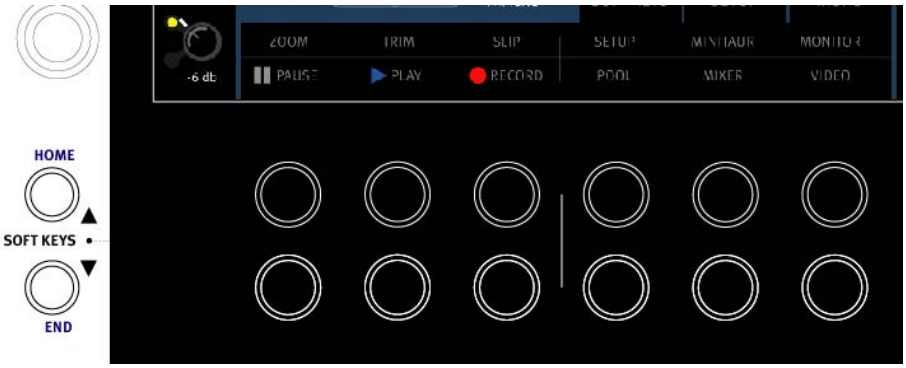

Figure 4-6 Soft Keys

Soft key labels contain text plus an optional icon.

Soft keys are organized into pages with 12 soft keys per page. The pages are numbered starting with one, there is no limit to the number of pages and a soft key can be programmed to go to an arbitrary soft key page, allowing creation of menus and webs of soft key pages.

The following keys are used to navigate through Soft Key pages:

SOFT KEYS ▲: Go to the previous soft key page, if there is one.

SOFT KEYS ▼: Go to the next soft key page, if there is one.

HOME: Go to Soft Key page 1.

END: Go to the last Soft Key page.

4.7 Jog Wheel and Transport Controls

The Jog Wheel controls jog, shuttle, zooming, and other functions. Surrounding it are keys that control Jog Wheel functions and transport keys.

Many EuCon applications control far more functions with the Jog Wheel, such as trimming clip head and tail, setting clip gain, making cross fades, etc. These functions are accessed using Soft Keys.

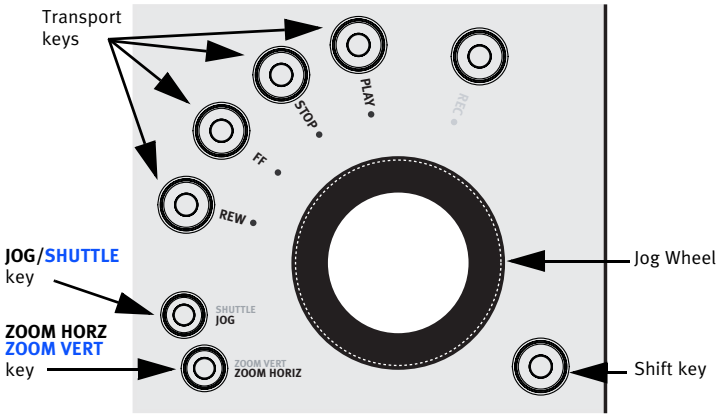

Figure 4-7 Jog wheel and transport keys

4.7.1 Jog Wheel Functions

JOG: Press the **JOG** key and spin the Jog Wheel clockwise and counterclockwise to move forward and backward, respectively, on the timeline. The yellow LED lights in this mode.

SHUTTLE: Press the **SHUTTLE** key and spin the Jog Wheel clockwise and counterclockwise to adjust the forward and backward playback speed, respectively.The playback speed is proportional to the wheel's position. The yellow LED lights in this mode.

ZOOM HORIZ: Press **ZOOM HORIZ** and spin the Jog Wheel to zoom horizontally in the application, typically for the arrange or project window time line. The yellow LED lights in this mode.

ZOOM VERT: Press **ZOOM VERT** and spin the Jog Wheel to zoom vertically, typically to adjust the track height or waveform in the arrange or project window. The yellow LED lights in this mode.

4.7.2 Transport Controls

REW

Press **REW** to rewind. This function varies with the application.

Implementations include:

- Rewind until **STOP** or another key is pressed.
- Rewind a fixed amount.
- Rewind while the **REW** key is pressed until it is released.

FF

Press **FF** to fast forward. This function varies with the application.

Implementations include:

- Fast forward until **STOP** or another key is pressed.
- Fast forward a fixed amount.
- Fast forward while the **FF** key is pressed until it is released.

STOP

Press **STOP** to stop all other functions.

PLAY

Press **PLAY** to play the project.

REC

Press **REC** begin recording at the present location. All tracks armed for recording are punched into record.

4.8 CONTROL ROOM/MONITOR Knob

Turn the **CONTROL ROOM** knob to adjust the volume of the control room. The knob controls either Studio Monitor Express or an application that supports a EuCon monitor section.

Press the **CONTROL ROOM** Knob Top key to mute the control room volume. Press it again to unmute.

Turn the **MONITOR** knob (Shift + **CONTROL ROOM**) to adjust the volume of Monitor A, commonly used as a headphone volume.

Press the **MONITOR** Knob Top key to mute the monitor volume. Press it again to unmute.

Chapter 5: Touchscreen and Controls

The MC Control has a wide aspect ratio Touchscreen mounted in its center.

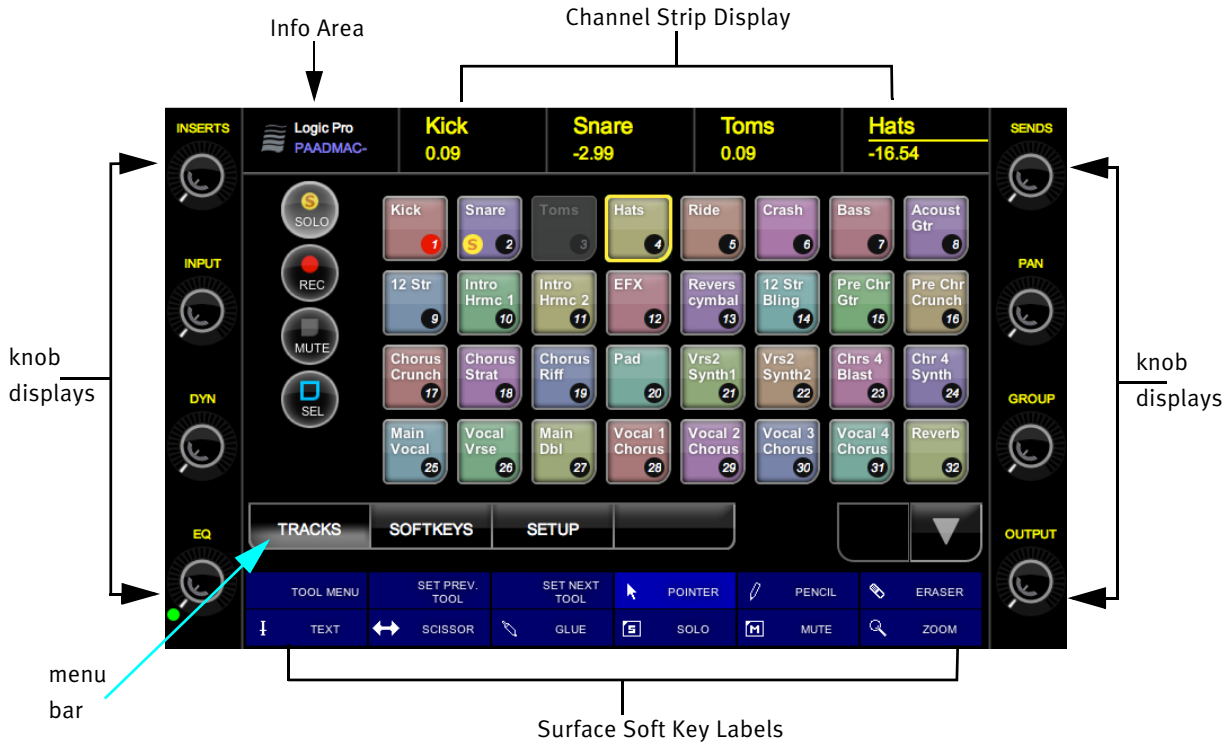

Figure 5-1 Touchscreen

The Touchscreen always shows the following:

Knob Displays: There are four on each side of the Touchscreen. They show the current knob function for their corresponding knob.

Info Area: Shows the application and workstation name, the primary and secondary time code displays, or the attentioned track name. Touch this area to switch between them.

Channel Strip Displays: Shows the tracks assigned to the channel strips. The attentioned track is underlined in yellow.

Soft Key Labels: Shows an optional icon followed by a text label for each of the 12 Soft Keys underneath the screen.

Menu Bar: Displays the Tracks view, Soft Key view, or Setup Screens on the Touchscreen. The center of the screen changes to reflect the selected Menu view.

5.1 Tracks View

Tracks view shows 32 tracks at a time so it allows quickly muting, soloing, arming, and selecting tracks that are not assigned to the faders.

Figure 5-2 Track View

Select an operation on one of the four circular buttons on the left and then touch one or more of the square track buttons to perform that operation on the selected tracks. Touch a selected track button again to deselect it.

Solo: A yellow circle surrounding an “S” on the lower left of the track rectangle shows the track is soloed.

Rec: A red circle around the track number in the lower right shows the track is armed to record.

Mute: A dark grey button shows the track is muted.

Sel: The track's rectangle is highlighted in yellow to show it is selected. The last track selected is attentioned.

▼▲: Scrolls down/up one line of eight tracks, if there are more lines of tracks in the project. Press the **Shift** key on the MC Control or the workstation keyboard and touch one of these buttons to scroll up/down a full page (32 tracks). The ▼▲ buttons are disabled if there are no further tracks to display.

5.2 Soft Key View

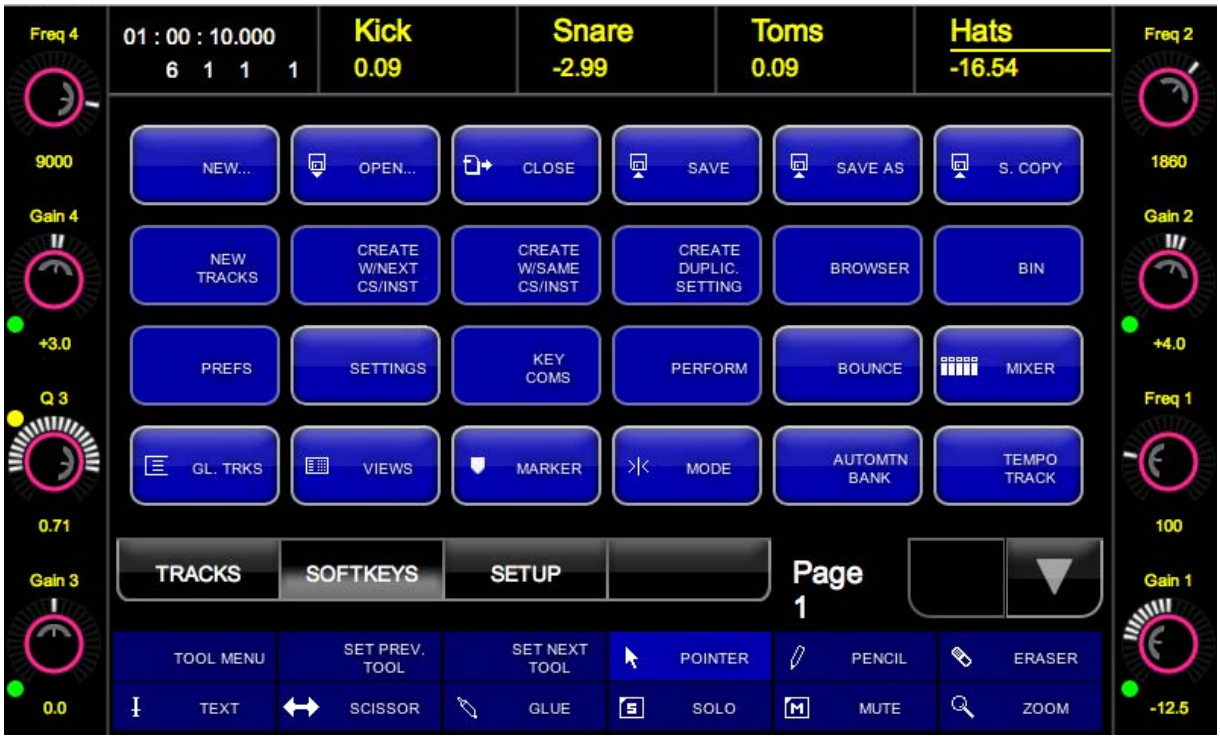

Figure 5-3 Soft Key View

This view displays 24 Touchscreen Soft Keys in four lines of six each.

▼ scrolls forward to the next page of Soft Keys (unless on last page).

▲ scrolls back to the previous page of Soft Keys (unless on page 1).

Simply touch a Soft Key to execute its function.

5.3 Setup Screens

Less commonly used functions are found on the following Setup Touchscreens. The Soft Keys navigate through them. The top-right Soft Key is **Exit**, which returns to the Touchscreen last used.

5.3.1 Control Room

The Control Room Touchscreen selects the source of the control room volume knob, and provides talkback, dim, and mute functions. This is typically used to control Studio Monitor Express but can also control EuCon monitor sections if an application supports it.

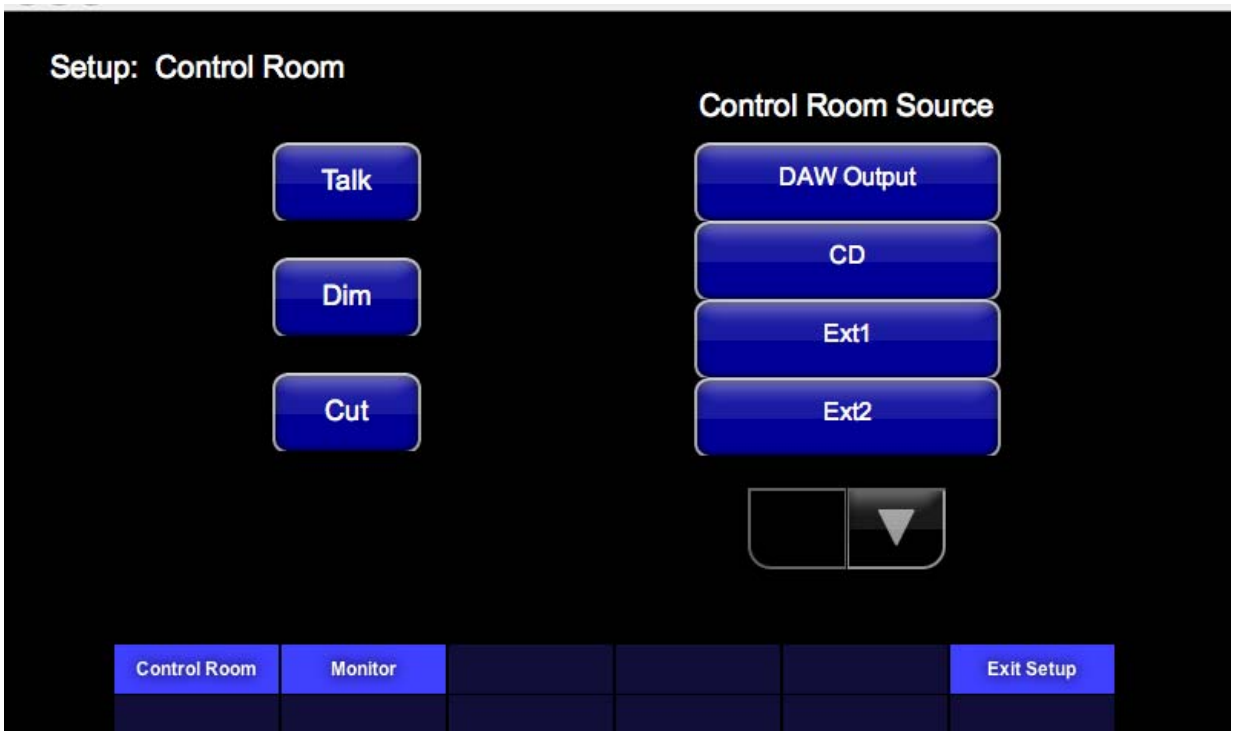

Figure 5-4 Setup: Control Room

Control Room Source: Shows the possible sources to the control room volume control. The ▼▲ arrow buttons scroll through sources if there are more than four. Touch to select the desired source, which is highlighted.

Talk: Engages the talk function, which is typically used to talk to talent in a different room. The button lights up when talk is engaged, even if engaged from the application or Studio Monitor Express GUI.

Dim: Dims the control room volume (lit when dim is active).

Cut: Mutes the control room volume (lit when cut is active).

5.3.2 Monitor

The Monitor Touchscreen selects the source of the monitor volume knob or mutes monitor A. Holding down the **Shift** key and turning the control room knob changes the volume of Monitor A in Studio Monitor Express or the attached application if it supports a EuCon monitor section.

Figure 5-5 Setup: Monitor

Monitor Source: Lists the possible sources to the monitor volume control. The ▼▲ arrow buttons scroll through sources if there are more than four. Touching one of the sources highlights it and makes it the current monitor source.

Cut: Mutes the monitor volume (lit when cut is active).

Chapter 6: EuControl

EuControl is launched automatically upon starting your Mac and runs in the background. EuControl is responsible for finding, linking, and communicating with all MC Controls and MC Mixes on the network. EuControl's configuration tasks are accessed by clicking the green icon on the Mac taskbar and selecting **EuControl Settings**.

Only one instance of EuControl can run on a workstation. However, multiple workstations on a single network can each run EuControl. Each instance of EuControl can connect an MC Control and up to four MC Mixes on the network. These multiple devices act together as a single control surface. Once connected, these Artist devices are not available to other instances of EuControl until relinquished.

Figure 6-1 Selecting EuControl Settings from the taskbar

The tabs are discussed in the order (left to right) they appear at the top of the EuControl Settings dialog.

6.1 Surfaces

The Surfaces tab shows all Artist devices on your network and those connected to your instance of EuControl.

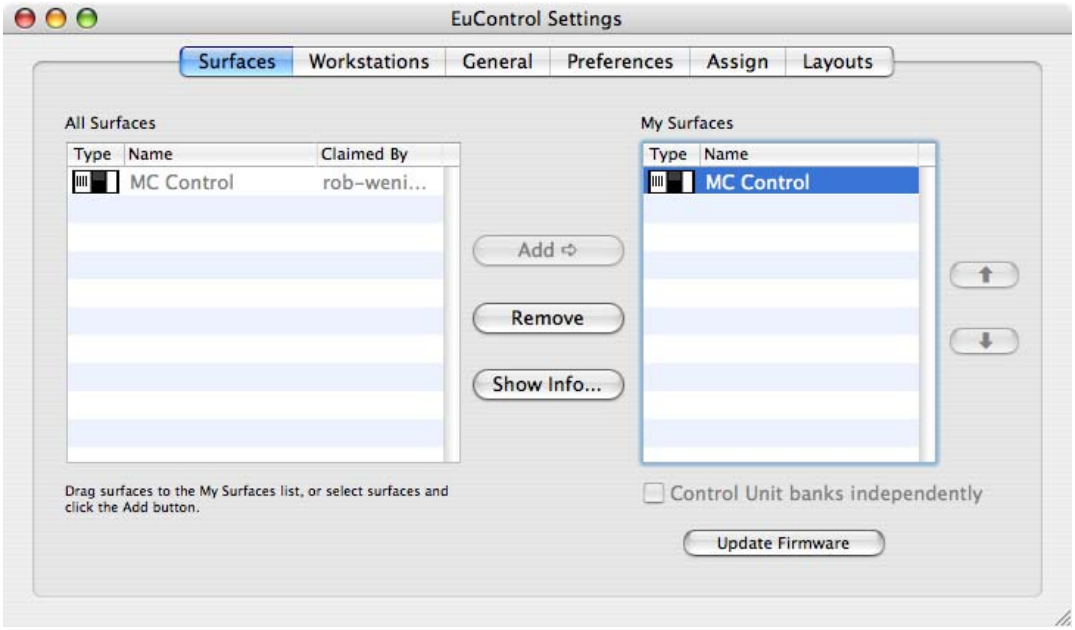

Figure 6-2 Surfaces tab

All Surfaces

All Surfaces shows all Artist devices on the network. A device shown in light gray is already connected either to your own or another instance of EuControl running on a different workstation. In both cases, it is not selectable.

My Surfaces

My Surfaces shows the Artist devices connected to your instance of EuControl. There can be one MC Control and up to four MC Mixes in the My Surfaces list, linked into a single large surface.

The top-to-bottom order corresponds to the left-to-right order of the surfaces, respectively. The leftmost surface has fader strip 1. Use the ⬆ and ⬇ buttons to reorder the list.

Each Artist device can be renamed by double-clicking the existing name and typing a new name.

Add ⇨

Click **Add ⇨** to add the selected **All Surfaces** entry to **My Surfaces**. This connects this Artist device to your instance of EuControl. You can also click and drag an Artist device from All Surfaces to My Surfaces.

Add ⇨ is disabled if all Artist devices in All Surfaces are connected to any instance of EuControl.

Remove

Click **Remove** to remove the selected surface from My Surfaces and make it available to other instances of EuControl.

Remove is disabled if no surface is selected.

Update Firmware

Each time a new version of EuControl is installed, each MC Control and MC Mix in your system may need its firmware updated. The firmware is embedded in EuControl so an Internet connection is not required.

Select each Artist device in the My Surfaces list (shift-click to select multiple devices). Press **Update Firmware** to update their firmware. If a dialog displays a message that the firmware is up to date, no further action is necessary.

Follow the instructions in the EuControl dialog box.

- The Artist devices must be plugged into a working power source.
- Do not power off any Artist devices during the update or attempt to interrupt the update.
- The status for each Artist device being updated is displayed on that device as well as in the EuControl dialog box.

Control unit banks independently

Select this checkbox to bank independently on a linked MC Control from other linked MC Mixes.

Show Info

Select an Artist device and click **Show Info** to display the name and hardware/software information on strip 1's channel display and in a dialog on the Mac.

6.2 Workstations

An Artist device can control applications running on a second computer, referred to in this guide as a *workstation*. The Workstations tab establishes the list of workstations that the **WORKSTATION** key cycles through. Any workstation running EuCon software can be in this list, including those controlled by the System 5-MC, MC Pro, and MC Control.

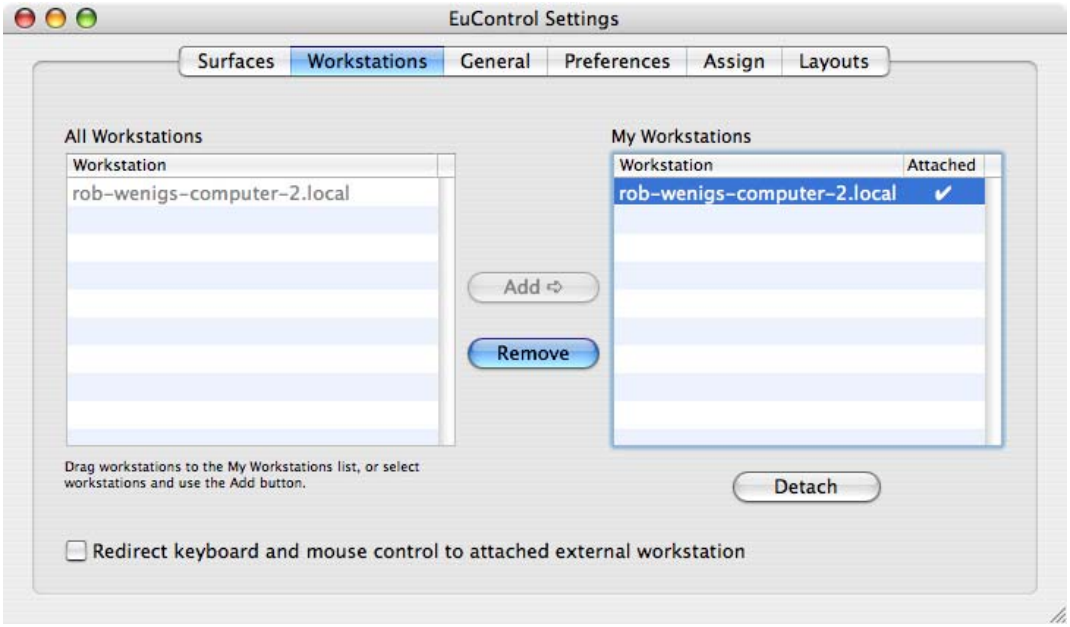

Figure 6-3 Workstations tab

All Workstations

All Workstations lists all EuCon-enabled workstations on the network. If the workstation is already in the My Workstations list, it is shown in gray and cannot be selected.

My Workstations

My Workstations lists the workstations that can be attached to by pressing the **WORKSTATION** key.

It is possible to put a workstation in the My Workstations list that is already attached to another instance of EuControl running on another computer. It cannot be attached here until it is unattached from the other instance of EuControl. This was done to allow multiple users to share workstations without having to frequently edit their My Workstation list.

Add ⇨

Click **Add ⇨** to add the selected workstation from the All Workstations list to the My Workstations list. If the workstation is already in the My Workstations list, it is gray and cannot be selected.

Remove

Click **Remove** to remove the selected workstation from the My Workstations list.

Attach/Detach

Select a workstation in the My Workstations list and click **Attach**. A check mark appears in the Attach column next to that workstation. This workstation is now communicating with the Artist device(s) connected to your instance of EuControl.

If the selected workstation is already attached, the button displays **Detach**.

Redirect keyboard and mouse control to attached external workstation

Your Mac's keyboard and mouse can control a second external workstation, if desired. Select this option to redirect keyboard and mouse control to the attached workstation. Note that the keyboard and mouse will no longer control your Mac. If this option is *not selected* (default setting), your keyboard and mouse control your Mac.

You can manually toggle control back and forth between your Mac and the attached external workstation by pressing **ctrl+option+**.

6.3 General

This tab controls how the Artist device and application software work together.

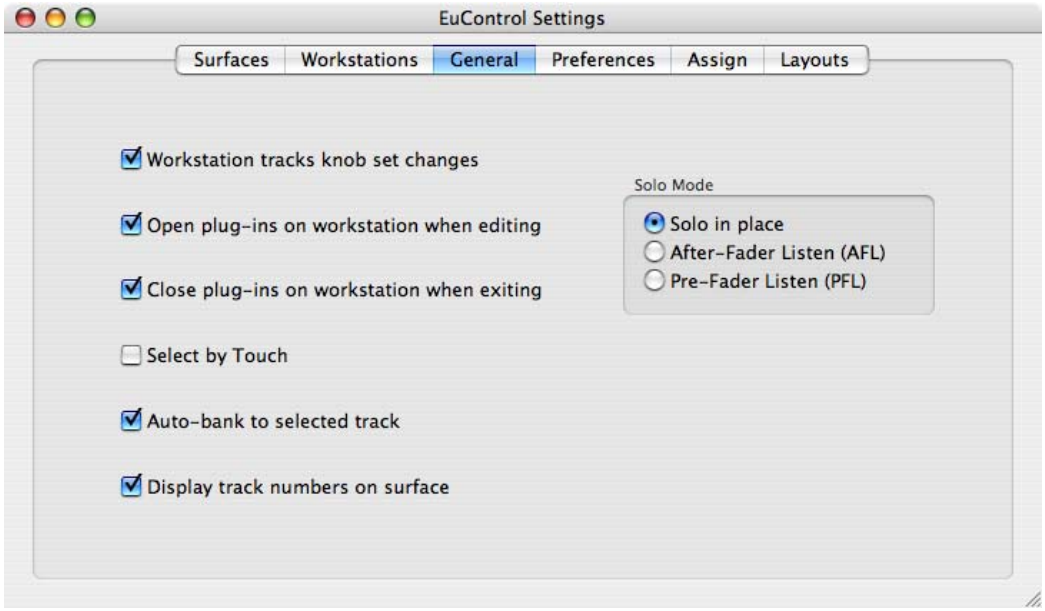

Figure 6-4 General tab

6.3.1 Workstation tracks knob set changes

The workstation is aware of which knobset is selected and displays appropriate controls.

6.3.2 Open plug-ins on workstation when editing

When a plug-in knobset is selected on the MC Control, the workstation opens the plug-in's window.

6.3.3 Close plug-ins on workstation when editing

When a plug-in's knobset is navigated from on the MC Control, the workstation closes the plug-in's window.

6.3.4 Select by Touch

Touching an MC Control fader selects that track in the application and attentions it on the MC Control. This is the same as pressing the fader **SEL** key.

6.3.5 Auto-bank to selected track

Selecting a track in the application causes the MC Control to display the bank containing that track. This keeps the selected track assigned to the surface.

6.3.6 Display track numbers on surface

The track number is included with the track name in the channel display.

6.3.7 Solo Mode

Solo in place

Mutes all tracks except solo track.

After-Fader Listen (AFL)

The Solo level is derived *after* fader level.

Pre-Fader Listen (PFL)

The Solo level is derived *before* fader level.

6.4 Preferences

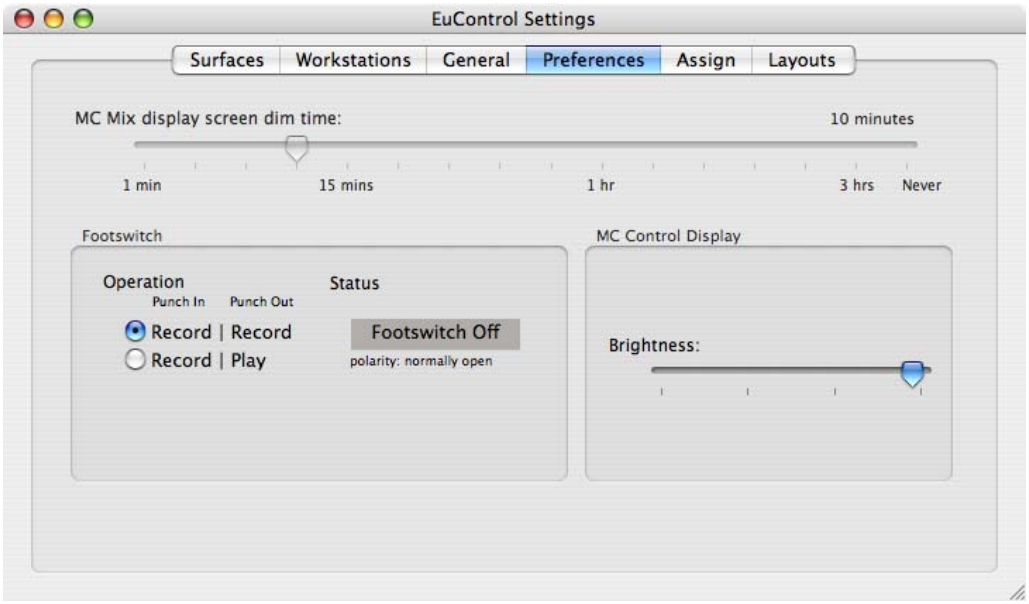

Figure 6-5 Preferences tab

6.4.1 MC Mix display screen dim time

Drag the slider to set the amount of inactive time before the display screens of any MC Mix(es) in your system dims to half intensity.

6.4.2 Footswitch

The footswitch punches in and out of recording. It is useful when recording and getting ready to play an instrument.

Two types of footswitches can be attached to an MC Control:

- **Momentary –** There are two momentary types: normally open, push to close; normally closed, push to open.
- **Toggle –** Latches when pushed on; push again for off.

We recommend using one of the momentary types. The toggle type works, but requires two presses. The MC Control automatically distinguishes between momentary types by checking whether the switch is open or closed upon power up.

Operation

This category selects what happens when the footswitch is pressed. Choose the option that best suits your application.

Record | Record: Pressing the footswitch presses the **RECORD** button, which punches in to record. Releasing the footswitch does nothing. Pressing the footswitch again also presses the **RECORD** button, which punches out.

Record | Play: Pressing the footswitch the first time presses the **RECORD** button, which punches in. Releasing it does nothing. Pressing it a second time presses the **PLAY** button, which punches out of recording and continues playback.

Status

This field cannot be set but shows the current status of the footswitch (on/off) and its polarity.

6.4.3 MC Control Display

Drag the **Brightness** slider to adjust the MC Control Touchscreen display. Note that this control is gray and inactive if an MC Control is not connected to your instance of EuControl.

6.5 Assign

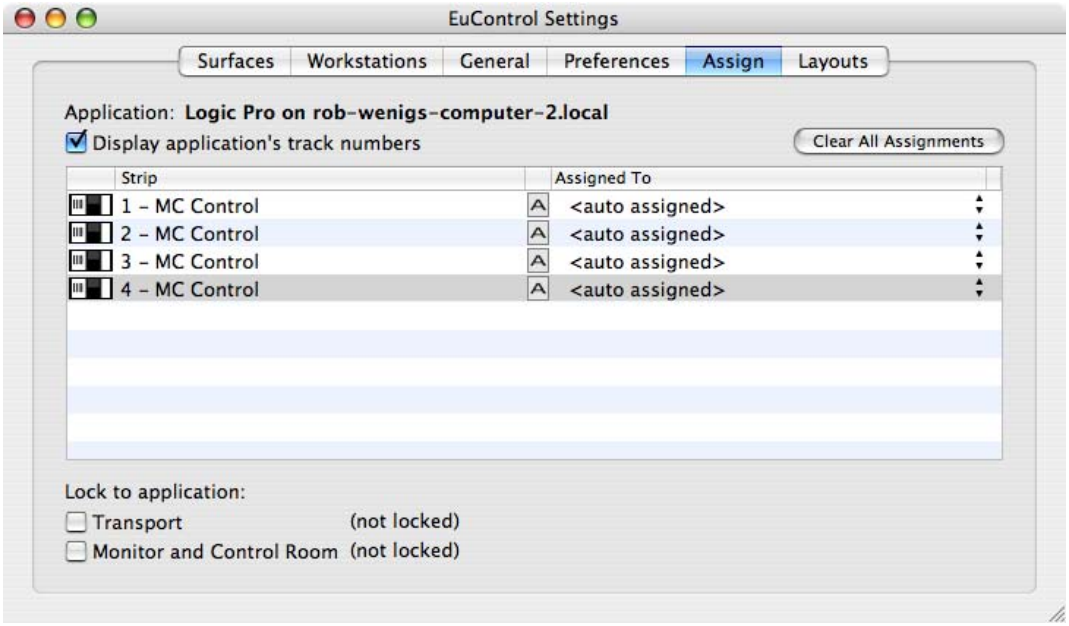

Figure 6-6 Assign tab

This tab manages how tracks are assigned to the MC Control's strips. By default, tracks are automatically assigned in banks of four.

NOTE: *When a project is reopened, the first four tracks are assigned to the strips.*

Click in the Assigned To column to pop up a menu with the following options:

- **auto assigned**: Tracks are assigned automatically in response to the **Bank** and **Nudge** buttons.
- **attentioned/selected track**: This strip is assigned the attentioned track. A track can be attentioned by selecting in the application or by pressing the fader **SEL** key.
- **blank strip**: This strip is kept blank and will not be included in **NUDGE** and **BANK** operations until a Layout is recalled or it is explicitly reassigned. This is useful when creating a Layout that does not require four tracks.

In the popup menu, the current selection has a checkmark to its left.

6.5.1 Display application's track numbers

Select this checkbox to display the track number in addition to the name.

6.5.2 Lock to application

Transport: Select this checkbox to lock the transport and Jog Wheel controls to the application listed at the top-left of the dialog (Logic Pro in Figure 6-6). The controls stay locked even when the selected application is not top-most.

Monitor and Control Room: Select this checkbox to lock the **CONTROL ROOM**/ **MONITOR** knob to the application listed at the top-left of the dialog. The controls stay locked even when the selected application is not top-most.

6.5.3 Clear All Assignments

Click **Clear All Assignments** to set all strips to being automatically assigned.

6.6 Layouts

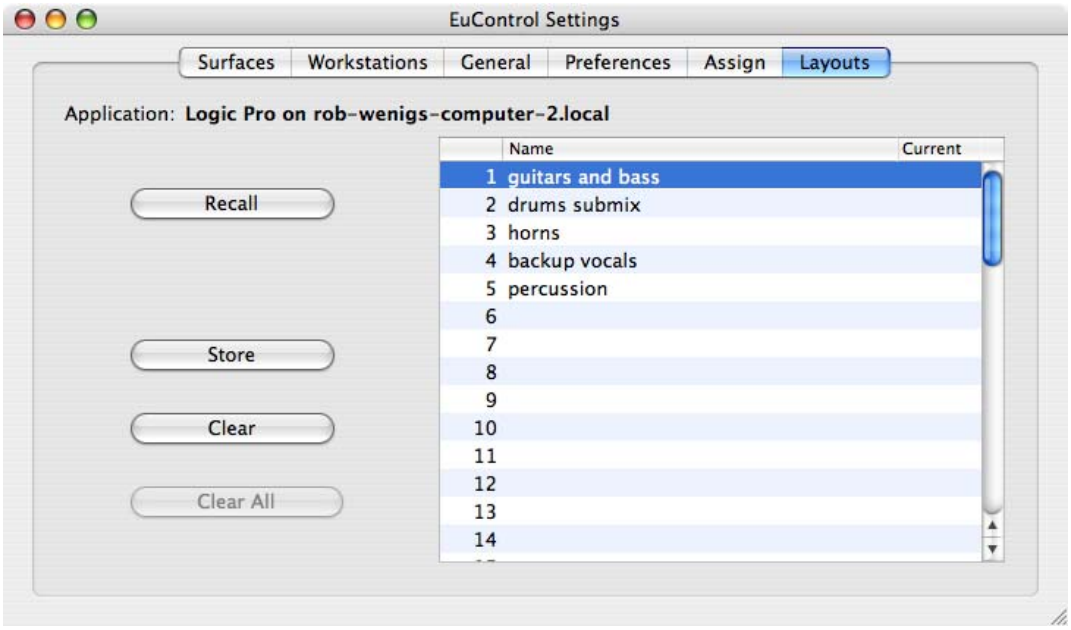

Figure 6-7 Layouts tab

The tracks assigned to the MC Control strips can be saved as a Layout. A Layout is created from the current strip assignments and can receive a name. It can then be recalled at a later time.

6.6.1 Recall

Highlight a name in the Name column and click **Recall** to recall that Layout.

6.6.2 Store

Click **Store** to store the MC Control's current track assignments as a new Layout. Double-click the default name in the Name column to edit the name.

6.6.3 Clear

Highlight a name in the Name column and click **Clear** to delete that Layout.

6.6.4 Clear All

Click **Clear All** to clear all Layouts. A dialog appears to confirm that you wish to delete all existing Layouts.

Appendix A: Setting the IP Address

Although most MC Control users will never have to set a static Internet Protocol (IP) address, the MC Control does allow it in the rare cases that require it.

Normally the MC Control uses Dynamic Host Configuration Protocol (DHCP) to obtain its IP address, typically from a router. The MC Control reverts to link-local addressing to generate an IP address if a DHCP server is not found on the network, such as when an MC Control is connected directly to a computer with an Ethernet cable. Both of these methods of obtaining IP addresses can be overridden by supplying a static IP address, which the MC Control uses in all cases when powered on.

CAUTION: Attempt this only if you have prior experience configuring a network.

To set a static IP address:

1. While holding down the **PAGE ◀** and **PAGE ▶** keys simultaneously, press and release the **POWER** button.

   The Network Setup screen appears on the Touchscreen.

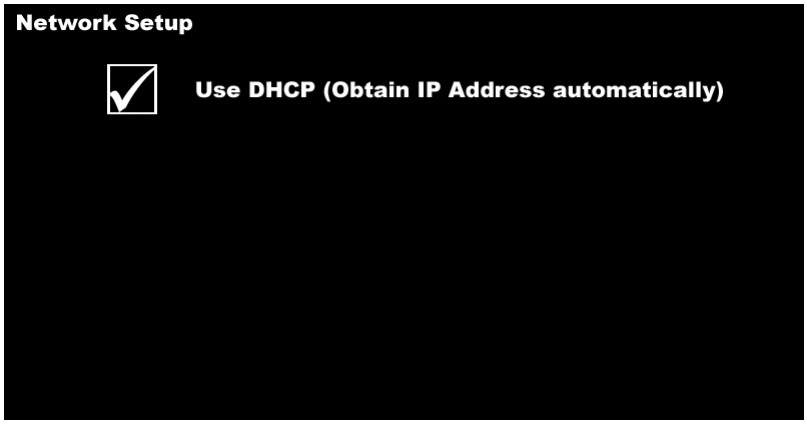

Figure 6-8 Network Setup Touchscreen with Use DHCP selected

2. Touch the parameter labeled **Use DHCP (Obtain IP Address automatically)**.

   This deselects the parameter and displays the **IP Address** and **Subnet Mask** fields on theTouchscreen.

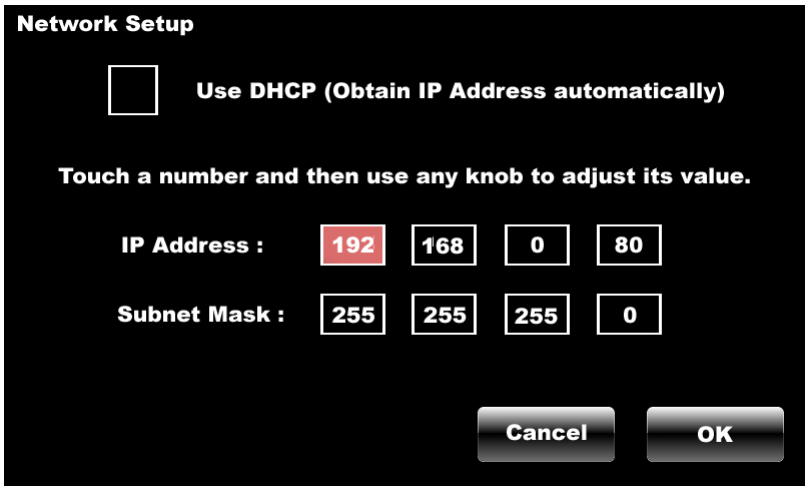

Figure 6-9 Network Setup Touchscreen with **IP Address** and **Subnet Mask** fields

3. Touch the first box of the **IP Address** field. Adjust its value by turning any of the eight knobs or the Jog Wheel.

4. Use this technique to adjust all values of the **IP Address** and the **Subnet Mask** fields.

5. Touch the **OK** button to save this static IP address. Power the MC Control off and on to use the new IP address.

   Touch the **Cancel** button to cancel changes made to the IP address at any time.